

**IN THE CLAIMS**

1. (currently amended): A method for eliminating noise signals adopted for use in a radio signal receiving device to correct noise signals bits in sampling bits, the radio signal receiving device receiving series data from a computer peripheral device, the radio signal receiving device being connected to a computer system through a universal series bus (USB) for transmitting the series data to the computer system, the method comprising steps of:

receiving a new sampling bit ~~and storing a first sampling bit from~~ of a plurality of sampling bits;

storing the new sampling bit as a new third sampling bit;

storing a previous third sampling bit as a new second sampling bit;

storing a previous second sampling bit as a new first sampling bit;

comparing ~~[[the]]~~ voltage levels of the new first, second, and third sampling ~~every sampling bit in the sampling data~~ bits to determine whether the new second sampling bit is a noise signal bit; and

correcting the noise signal bit based on the voltage level of the new first sampling bit and the ~~[[last]]~~ voltage level of the new third sampling bit ~~of the sampling bits~~.

2. (currently amended): The method of claim 1, further comprising steps of:  
determining a present voltage level based on a present sampling bits number;  
calculating a number of the stored first sampling bits that have ~~[[the]]~~ a same voltage level; and

determining whether the number ~~is coincided~~ coincides with ~~[[the]]~~ a width of a data bit based on the sampling bit number of a preceding voltage level,



arranging sampling bit sets coinciding with the width of the data bit, and  
gathering a complete data package for transferring to the computer system through the  
USB.

3. (currently amended): The method of claim 2, wherein in the step of determining the  
present voltage level, the voltage level of the sampling bits is set as the present voltage level after  
receiving a plurality of sampling bits of the same voltage level.

4. (currently amended): The method of claim 2, wherein in the step of determining the  
present voltage level, when the voltage level of the last receiving sampling bit is different from  
that of the received sampling bits, the voltage level of the received sampling bits is set as the  
present voltage level.

5. (new): A method for eliminating noise signals adopted for use in a radio signal  
receiving device to correct noise signals bits in sampling bits, the radio signal receiving device  
receiving series data from a computer peripheral device, the radio signal receiving device being  
connected to a computer system through a universal series bus (USB) for transmitting the series  
data to the computer system, the method comprising steps of:

receiving a new sampling bit of a plurality of sampling bits;

storing the new sampling bit as a new  $n$ th sampling bit, storing a previous  $n$ th sampling  
bit as a new  $(n-1)$ th sampling bit, and so on through the plurality of sampling bits, finally storing  
a previous second sampling bit as a new first sampling bit;



comparing voltage levels of the new plurality of sampling bits to determine whether the new ( $n-1$ )th sampling bit is a noise signal bit; and

correcting the noise signal bit based on the voltage level of the new first sampling bit and the others of the plurality of sampling bits except for the new second sampling bit.

6. (new): The method of claim 5, further comprising steps of:  
determining a present voltage level based on a present sampling bits number;  
calculating a number of the stored first sampling bits that have a same voltage level; and  
determining whether the number coincides with a width of a data bit based on the sampling bit number of a preceding voltage level,  
arranging sampling bit sets coinciding with the width of the data bit, and  
gathering a complete data package for transferring to the computer system through the USB.

7. (new): The method of claim 6, wherein in the step of determining the present voltage level, the voltage level of the sampling bits is set as the present voltage level after receiving a plurality of sampling bits of the same voltage level.

8. (new): The method of claim 6, wherein in the step of determining the present voltage level, when the voltage level of the last receiving sampling bit is different from that of the received sampling bits, the voltage level of the received sampling bits is set as the present voltage level.